

ABSTRACT OF THE DISCLOSURE

A coupling in a metrology system for placement between a floating inspection chamber and a fixed transfer chamber. The coupling prevents transfer of vibrations between the chambers and seals a passage between the chambers. The coupling includes a first flange attached to the inspection chamber, a second flange not in contact with the first flange and attached to the transfer chamber, and a looped diaphragm having an outer peripheral edge region secured to the first flange and an inner peripheral edge region secured to the second flange to thereby couple the flanges together and close a space between the flanges. Clamps are provided for securing the outer and inner peripheral edge regions of the diaphragm to the first and second flanges, respectively.